

SYSTEM AND METHOD FOR ANALYZING VIBRATION SIGNALS

Abstract of the Disclosure

5 A system and method for analyzing vibrations signals thereby identifying damage or original manufacture defects in a vibrating device. In one embodiment of the invention, the method comprises collecting vibration signal data from at least one vibrating device, wherein the vibrating device includes at least an rotating inner ring, a rotating outer ring, and a plurality of rotating elements. The vibration signal data is enveloped and converted into a frequency domain signal. The amplitude of the frequency domain signal at certain defect frequencies is divided by a noise floor to provide a damage index. If the damage index exceeds an adjustable user-defined threshold, a warning is generated so as to alert a user of damage or original manufacture defects in the vibrating device.

15 PATENT

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